



**International Student Exchange Program Between
The University of Tennessee Institute of Agriculture
and
Kasetsart University (Thailand)
2000 – 2001 Report**



Introduction

In 1999, University of Tennessee Institute of Agriculture and Kasetsart University (Thailand) administrators and faculty agreed to establish a student exchange program modeled after a long-standing and successful student exchange program between Kasetsart University and Tokyo Agricultural University. The overall goal was to expand the participants' horizons and vision of the world through understanding and appreciation of each country's culture and agricultural and natural resource industries. In addition, the program was intended to give the students a set of new life experiences and engender an increased sense of self-confidence. Finally, it was hoped that the students' participation in the program would serve to expand their employment opportunities--that they would apply for and be more competitive for a wider range positions in the world workplace.

Each university agreed to host a group of 10 to 12 students and accompanying faculty for a one-month period during which participants would tour agricultural and natural resource sites and industries, a variety of cultural attractions, and experience a home stay. Furthermore, each university agreed to cover all expenses for ground transportation, housing and meals incurred while hosting the visiting delegation. In 2000 – 01, two cycles of exchange study tours were conducted. A total of 24 Kasetsart University students and 8 faculty members, and a total of 21 University of Tennessee students and 8 faculty members participated. In each year Kasetsart University students and faculty spent the month of May in Tennessee and University of Tennessee students and faculty spent the month of June in Thailand.

Program Participants

Academic majors of participating Kasetsart University students included Ag Extension and Communication, Horticulture, Ag Machinery, Home Economics, Animal Husbandry, Entomology, Soil Science, Forest Biology, Genetics, Biotechnology, Conservation, Accounting, Hotel Management, and General Management. Academic majors of participating University of Tennessee students included Animal Science, Agricultural Economics, Agricultural and Extension Education, Agricultural and Biosystems Engineering, Entomology and Plant Pathology, Food Science and Technology, Forestry, Wildlife and Fisheries, Ornamental Horticulture and Landscape Design, Plant and Soil Science, Recreational Therapy, and Community Health. The students were hand-selected by their departments. Criteria included strong interest on the part of the student, lack of previous international experience, and the students' return in the fall to continue their academic program. Beginning in mid-February, the students met weekly to learn about the culture and customs of Thailand, learn key phrases and sample Thai cuisine. Orientation concluded with the arrival of a group of students and faculty from Kasetsart University in mid-April.

Dr. Lop Phavaphutanon, Department of Horticulture has served as the coordinating faculty member from Kasetsart University. Dr. Robert Orr (International

Programs Coordinator) and Dr. Kelly Robbins (Animal Science Department) have served as the University of Tennessee's program co-directors.

Program

The Kasetsart University delegations toured sites in east, middle and west Tennessee. While in Knoxville participants stayed in area hotels and individual family homes. Other housing locations included the Clyde York 4-H Center in Crossville, the W. P. Ridley 4-H Center in Columbia, and the Ames Plantation in Grand Junction. Agricultural- and natural-resource-related tours/presentations included, among others, Sweetwater Valley Dairy Farm and Cheese Company, Monterey Mushrooms, Cargill Corn Milling Division, Tyson Poultry Processing Plant, Clifty Farms, Waterfall Farms (Tennessee Walking Horse farm), Great Smoky Mountain National Park, Fall Creek Falls State Park, Tennessee Farm Bureau, Tennessee Department of Agriculture, and the Knoxville, Middle Tennessee, Jackson, and Milan Experiment Stations. Example cultural excursions included the Museum of Appalachia, Sequoyah Museum, Tennessee Aquarium, Pinson Mounds State Archeological Park, Memphis' Beale Street, and Nashville's 2nd Avenue district. Illustrated daily schedules can be accessed from the following websites: http://web.utk.edu/~ipanr/exchanges/thailand/2000kustudents/KU-UT_student_exchanges.htm and http://web.utk.edu/~ipanr/exchanges/thailand/2001kustudents/KU-UT_student_exchanges.htm

The 2000 University of Tennessee delegation traveled from Bangkok to and from the northern most point in Thailand at the border with Laos and Myanmar (Golden Triangle). A detailed, illustrated daily schedule for this study tour is available at: http://web.utk.edu/~ipanr/exchanges/thailand/2000utstudents/student_trip.htm

The 2001 study tour, which may be viewed at: http://web.utk.edu/~ipanr/exchanges/thailand/2001utstudents/student_trip.htm was a more activity-oriented program with less time spent traveling from location to location. Upon arrival in Thailand, the group saw cultural sites in Bangkok and made an official visit to Kasetsart University. Then the fun and work began. The next two and one-half weeks were spent touring central, northeastern, and eastern Thailand. Agricultural and agribusinesses visited included:

- Supa Orchids (produced 50 million orchid micro-cuttings in 2000 and ships to Japan, US, Indonesia, Australia and other countries);
- Chareon Phokpand (CP) Group operations including a feed mill, poultry processing plant, milk processing facilities, corn seed production facility;
- Farm Chokchai, an integrated dairy (3,000 head) and agro-tourism operation;
- Fresh Meat Co., Ltd., a swine slaughterhouse and processing operation,
- Boonrawd Farm, a vineyard and winery; and
- Vanachai Group Public Co., Ltd., a medium density fiberboard factory.

Kasetsart University Research stations included:

- Animal Hospital operated by the Veterinary Faculty

- Tab Kwang Swine Research Station;
- Suwan Farm (the National Corn and Sorghum Research Station)
- Siracha Fisheries Research Station
- Trat Agroforestry Research Station

Ministry of Agriculture facilities visited included the Chanthaburi Horticulture Research Station and the Pathum Thani Rice Research Station. Students learned about the research being conducted to improve crop production. This entailed not only management practices, but also crop improvement using biotechnology.

Other sites visited included a wholesale fruit and vegetable market where rambutan, longong, pommelo, durian, salac, coconut, rice, grapes, rose apple, pineapple and numerous other tropical fruits and vegetables are sold; a floating market where students learned how to bargain for a good deal; muscle beds in the Gulf of Thailand; mangrove reforestation projects; shrimp and other seafood farming operations; vegetable production, grading and shipping operations; essential oil extraction facility; dairy operations; Nong Nooch Tropical Garden that has the world's largest palm collection; and Queen Saovabha Memorial Institute and Snake Farm where anti-venom for the six most common poisonous snakes in Thailand is made. During the course of the month, the students' learned that other countries have major agricultural operations and compete with the U.S. in the global agricultural community.

Among the cultural and historic sites visited were: Ayuthaya (Thailand's capitol from the 14th through the mid-18th century); Bang Pa-In, the summer palace of the King; the Grand Palace; Nakhon Pathom Chedi, the largest pagoda in Thailand; "Bridge over the River Kwai", Death Railway and Kanchanaburi War Cemetery; and the Thai Red Cross Cambodian Refugee Center that operated during the reign of the Khmer Rouge and the days of the "Killing Fields".

Upon their return to Bangkok, the students went with host families for the weekend. They each had different experiences that included the spectrum of Thai life from the celebration surrounding a young man leaving his family to become a monk at a Buddhist monastery, to extended family dinners, to nightlife in the Bangkok dance scene, to a Buddhist funeral (including the ceremonial cremation, collection of ashes and bones, and the disposition of the remains in the sea).

Besides learning much about the agriculture and agribusinesses in Thailand, students gained an appreciation of the efforts made by the Thai government to improve education and the opportunities available to its citizens. They saw efforts made at developing agricultural production systems that are fully integrated with environmental protection at Kung Krabaen Bay Royal Development Study Center. They saw the efforts of the King to develop new technologies utilizing agricultural products at the Royal Chitralada Project on the grounds of the King's Bangkok residence.

Participating UTK students maintained a daily journal during their respective study tour, and during fall semester subsequent to their study tour, presented a college-

wide group seminar and individual department seminars. Participants were allowed 3 hours credit in ANR 491, International Study.

Funding for the 2001 exchange programs came from the College of Agricultural Sciences and Natural Resources and Kasetsart University. The University of Tennessee was responsible for all travel, food and lodging during the Kasetsart University study tours in Tennessee. Similarly, Kasetsart University was responsible for all travel, food and lodging during the UT study tours in Thailand. Student expenses were limited to the purchase of round-trip air tickets.

Outcome

Dr. Nancy Howell (College of Veterinary Medicine) designed pre- and post-tour assessment surveys. The pre-tour assessments were administered to the Kasetsart University delegations during the first week of their tours of Tennessee. The post-tour assessments were administered during wrap-up meetings held prior to their return to Thailand. University of Tennessee participants completed the pre-tour assessment following completion of orientation programs but prior to departure for Thailand. The post-tour assessments were administered one week following their return.

Survey results (Figures 1- 4) clearly indicate that the program goal to engender participants' understanding and appreciation of each country's society, culture, agricultural and food industries was achieved. Students' knowledge of the host country's

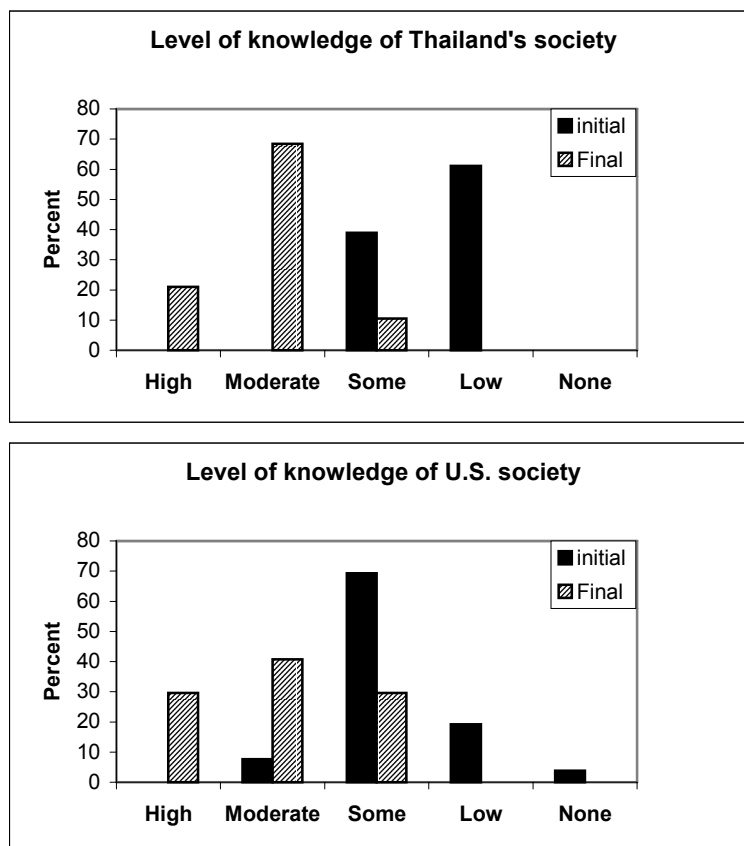


Fig. 1. Pre- and post-tour assessment of US students' level of knowledge of Thailand's society (top), and Thai students' level of knowledge of US society (bottom). Data for '00 and '01 were combined; pre- and post-tour differences were significant ($P < .001$)

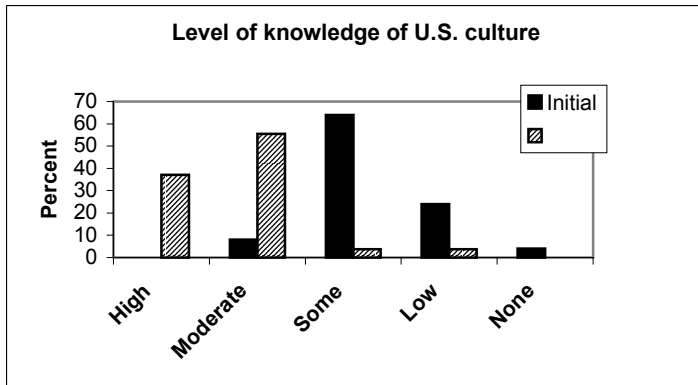
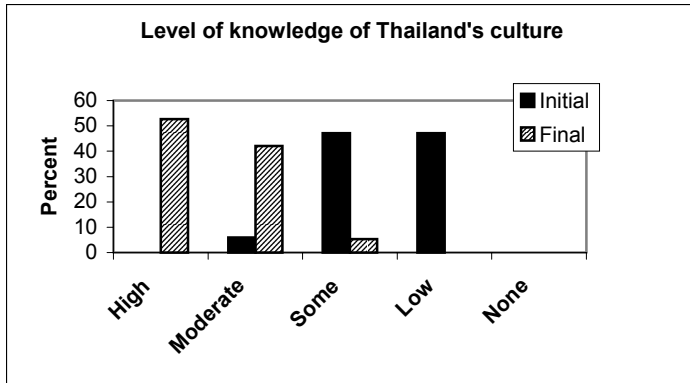


Fig. 2. Pre- and post-tour assessment of US students' level of knowledge of Thailand's culture (top), and Thai students' level of knowledge of US culture (bottom). Data for '00 and '01 were combined; pre- and post-tour differences were significant ($P < .001$)

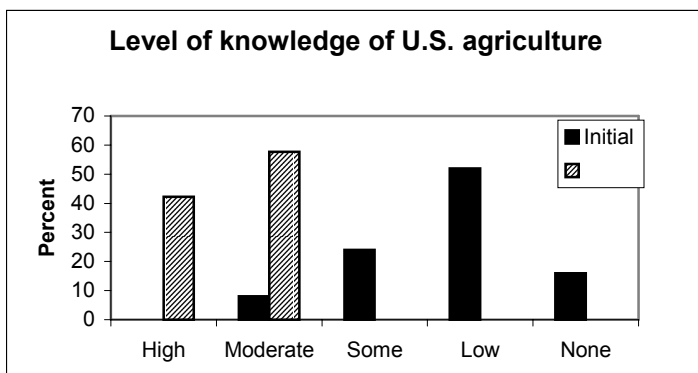
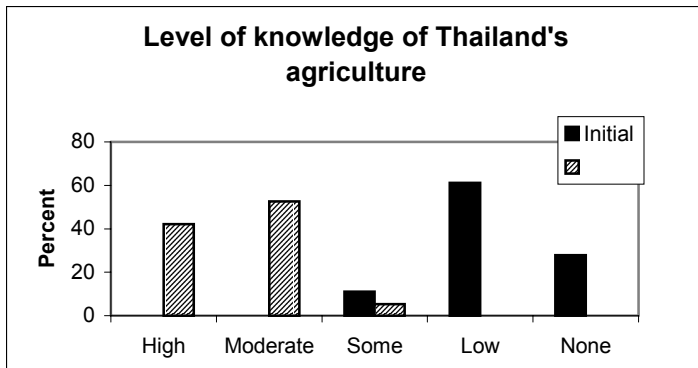


Fig. 3. Pre- and post-tour assessment of US students' level of knowledge of Thailand's agriculture (top), and Thai students' level of knowledge of US agriculture (bottom). Data for '00 and '01 were combined; pre- and post-tour differences were significant ($P < .001$)

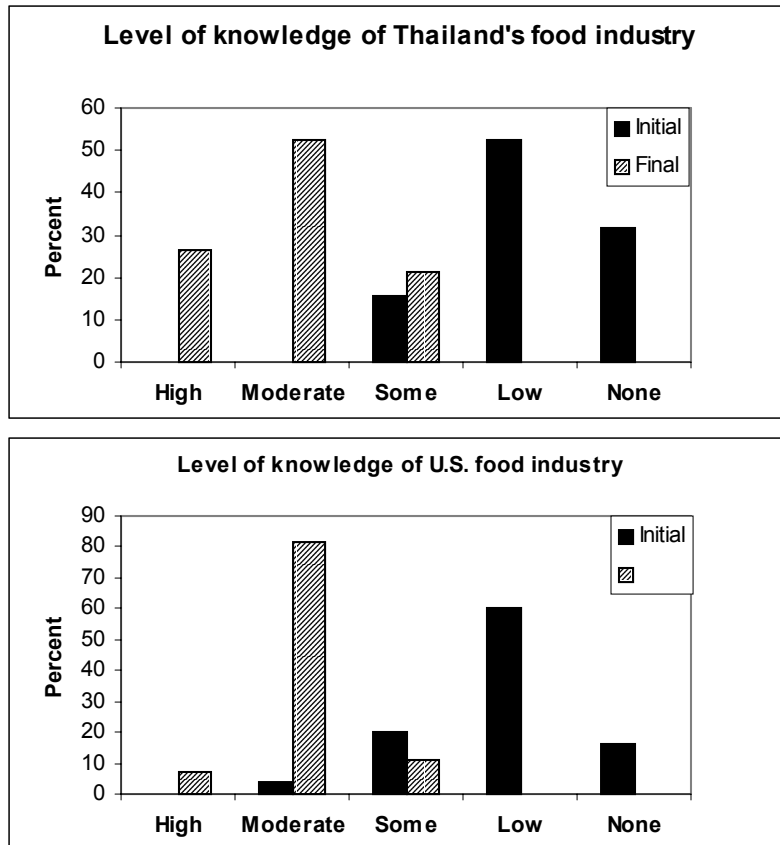


Fig. 4. Pre- and post-tour assessment of US students' level of knowledge of Thailand's food industry (top), and Thai students' level of knowledge of US food industry (bottom). Data for '00 and '01 were combined; pre- and post-tour differences were significant ($P < .001$)

society, culture, agricultural and food industries was substantially increased as a result of their respective study tours. It is indeed interesting how similar the responses of Thai and U.S. students were. For each, >90% of the students indicated only some or less knowledge before the tour and >75% indicated a moderate to high level of knowledge at tour conclusion. It should also be noted that both U.S. and Thai students were given a rather thorough orientation prior to their respective trips abroad. The orientation for U.S. students included rudimentary language training and social norms and customs. Thai students currently enrolled at UTK led many of these orientation sessions; thus, students "exposure" to Thai culture and society during the orientation was considerable. Nonetheless, their pre- and post-tour responses clearly emphasize the minimal impact of classroom discussions compared to immersion in the culture itself.

U.S. students perceived Thailand's agriculture to be slightly more progressive than they had initially assumed; whereas Thai students perceived U.S. agriculture to be slightly less progressive than initially assumed (Figure 5). Both groups perceived that the host country's agricultural techniques and agricultural education were slightly more developed than they had initially assumed (figures 6 and 7).

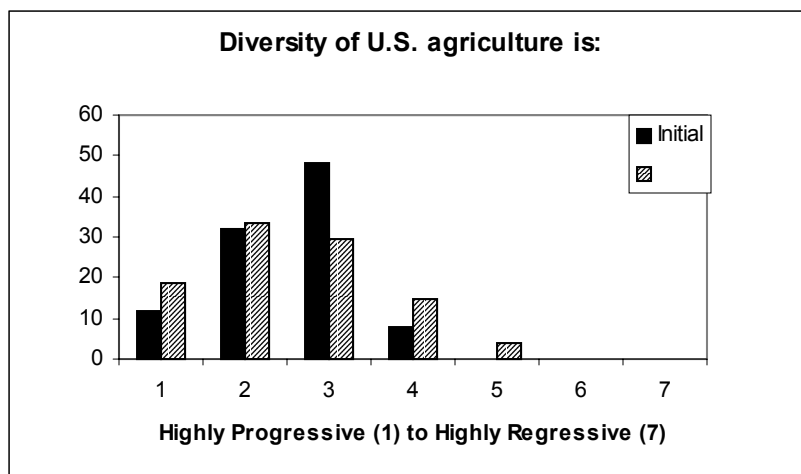
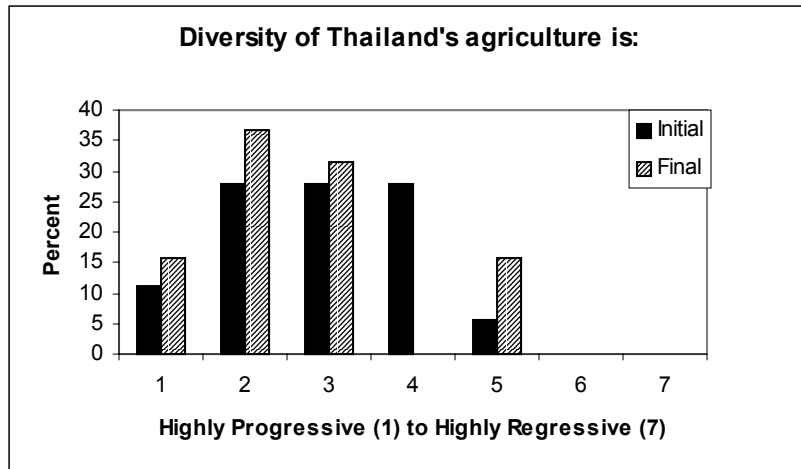


Fig. 5. Pre- and post-tour assessment of US students' assessment of the level of diversity of Thailand's agriculture (top), and Thai students' assessment of the level of diversity of U.S. agriculture (bottom). Data for '00 and '01 were combined; pre- and post-tour differences were significant ($P < .05$)

The survey also asked participants to list their opinions of the primary obstacles facing the host country's agriculture and to indicate what they found most interesting. All Kasetsart University students concluded that high cost of labor, high cost of other production inputs, soil erosion and growing season were the primary obstacles facing U.S. agriculture. The most often cited interesting observations were the significant emphasis and success in advancing agricultural technology in an environmentally sustainable manner, high level of technical knowledge of producers, the relatively low labor inputs required and the manner in which producers managed a limited growing season. U.S. students cited ineffective transfer of new knowledge and information to producers, and marketing as primary obstacles facing Thai agriculture.

For both Thai and U.S. students, the homestays created the most initial anxiety, but clearly were the highlight of their study tours. The homestay adventures afforded the students unique opportunities to experience the other culture from within a family and to get a glimpse of daily life and the rituals of passage in that society. In 2001, for example, home stay experiences of U.S. students included a Thai wedding, the celebration of a son becoming a monk, and participation in a Thai funeral. Anxiety gave way to appreciation, understanding and self-confidence.

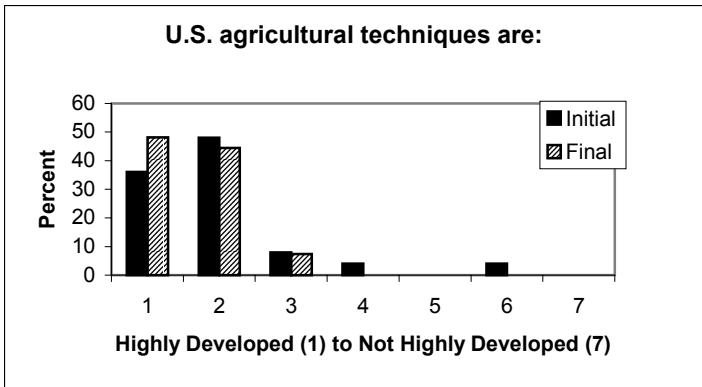
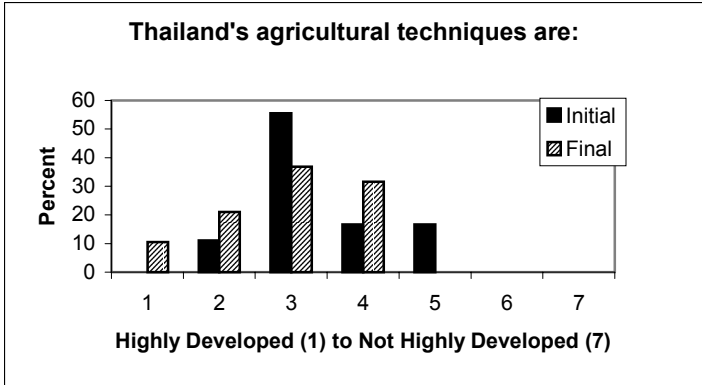


Fig. 6. Pre- and post-tour assessment of US students' assessment of Thailand's agricultural techniques (top), and Thai students' assessment of U.S. agricultural techniques (bottom). Data for '00 and '01 were combined; pre- and post-tour differences were significant ($P < .05$)

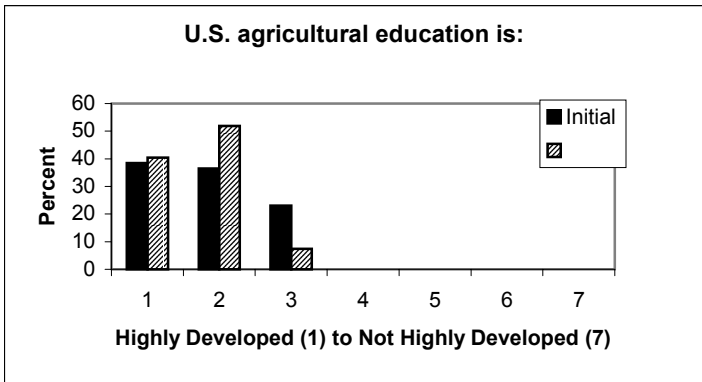
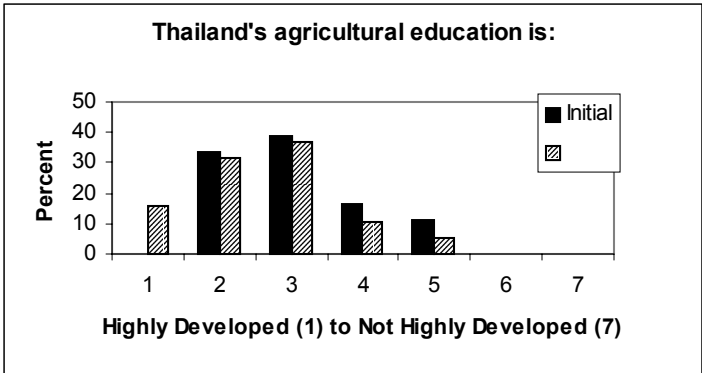


Fig. 7. Pre- and post-tour assessment of US students' assessment of Thailand's agricultural education (top), and Thai students' assessment of U.S. agricultural education (bottom). Data for '00 and '01 were combined; pre- and post-tour differences were significant ($P < .05$)

Conclusions

Now, and even more so in the future, agricultural professionals must be prepared to work in a global marketplace to be successful. It is especially important that our students develop an understanding and appreciation for other cultures and global competition in the agriculture sector, and that they also develop personal characteristics of self-confidence and willingness to address new situations necessary for success in a changing world. It is therefore incumbent on us to provide diverse learning opportunities in international agriculture, and student exchange programs of this sort are one very effective means to accomplish this.

A third University of Tennessee and Kasetsart University exchange program is planned for May – June, 2002. Given the success of the 2000 – 2001 programs, student interest in the 2002 program has been very high. By December 2001, 12 students had already committed to participating.